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**RAW SEQUENCE LISTING**

DATE: 02/24/2003

PATENT APPLICATION: US/09/762,105A

TIME: 15:27:08

Input Set : A:\Maliga'105CorrectedSeqList2.txt

Output Set: N:\CRF4\02242003\I762105A.raw

3 <110> APPLICANT: Maliga, Pal
 4 Kuroda, Hiroshi
 5 Khan, Muhammad Sarwar
 6 Rutgers, The state University of New Jersey
 8 <120> TITLE OF INVENTION: Translation Control Elements for High-Level Protein
 9 Expression in the Plastids of Higher Plants and
 10 Methods of Use Thereof
 12 <130> FILE REFERENCE: Rut 00-0010
 14 <140> CURRENT APPLICATION NUMBER: 09/762,105A
 15 <141> CURRENT FILING DATE: 2001-04-23
 17 <150> PRIOR APPLICATION NUMBER: PCT/US99/17806
 18 <151> PRIOR FILING DATE: 1999-08-03
 20 <150> PRIOR APPLICATION NUMBER: 60/138,764
 21 <151> PRIOR FILING DATE: 1999-06-11
 23 <150> PRIOR APPLICATION NUMBER: 60/095,163
 24 <151> PRIOR FILING DATE: 1998-08-03
 26 <150> PRIOR APPLICATION NUMBER: 60/095,167
 27 <151> PRIOR FILING DATE: 1998-08-03
 29 <150> PRIOR APPLICATION NUMBER: 60/112,257
 30 <151> PRIOR FILING DATE: 1998-12-15
 32 <150> PRIOR APPLICATION NUMBER: 60/131,611
 33 <151> PRIOR FILING DATE: 1999-04-29
 35 <160> NUMBER OF SEQ ID NOS: 132
 37 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 39 <210> SEQ ID NO: 1
 40 <211> LENGTH: 227
 41 <212> TYPE: DNA
 42 <213> ORGANISM: Artificial Sequence
 44 <220> FEATURE:
 45 <223> OTHER INFORMATION: Synthetic sequence
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 49 agggggcagg gatggctata tttctgggag aattaaccga tcgacgtgca agcggacatt 120
 50 tatttttaaat tcgataattt ttgcaaaaac atttcgacat atttatttat tttattatta 180
 51 tgagaatcaa tcctactact tctggttctg gggtttccac ggctagc 227
 54 <210> SEQ ID NO: 2
 55 <211> LENGTH: 191
 56 <212> TYPE: DNA
 57 <213> ORGANISM: Artificial Sequence
 59 <220> FEATURE:
 60 <223> OTHER INFORMATION: Synthetic sequence
 62 <400> SEQUENCE: 2
 63 gagctcgctc ccccgccgctc gttcaatgag aatggataag aggctcgctgg gattgacgtg 60

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64 agggggcagg gatggctata tttctgggag aattaaccga tcgacgtgca agcggacatt      120
65 tatttttaa at tcgataattt ttgcaaaaac atttcgacat atttatttat tttattatta      180
66 tgagagctag c                                                                191
69 <210> SEQ ID NO: 3
70 <211> LENGTH: 227
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Synthetic sequence
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79 agggggcagg gatggctata tttctgggag aattaaccga tcgacgtgca agcggacatt      120
80 tatttttaa at tcgataattt ttgcaaaaac atttcgacat atttatttat tttattatta      180
81 tgagaataaa cccgacaaca agtggaagtg ggggtgtccac ggctagc                    227
84 <210> SEQ ID NO: 4
85 <211> LENGTH: 196
86 <212> TYPE: DNA
87 <213> ORGANISM: Artificial Sequence
89 <220> FEATURE:
90 <223> OTHER INFORMATION: Synthetic sequence
92 <400> SEQUENCE: 4
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94 agggggcagg gatggctata tttctgggag ttacgtttcc acctcaaagt gaaatatagt      120
95 atttagttct ttctttcatt taatgcctat tgggtgtcca aaagtcctt tccgaagtcc      180
96 tggagaggaa gctagc                                                            196
99 <210> SEQ ID NO: 5
100 <211> LENGTH: 154
101 <212> TYPE: DNA
102 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <223> OTHER INFORMATION: Synthetic sequence
107 <400> SEQUENCE: 5
108 gagctcgctc ccccgccgctc gttcaatgag aatggataag aggctcgtgg gattgacgtg      60
109 agggggcagg gatggctata tttctgggag ttacgtttcc acctcaaagt gaaatatagt      120
110 atttagttct ttctttcatt taatgcctgc tagc                                    154
113 <210> SEQ ID NO: 6
114 <211> LENGTH: 195
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Synthetic sequence
121 <400> SEQUENCE: 6
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123 agggggcagg gatggctata tttctgggag tcgagtagac cttgttggtg tgaaaattct      120
124 taattcatga gttgtaggga gggatttatg tcaccacaaa cagagactaa agcaagtgtt      180
125 ggattcaaag ctagc                                                            195
128 <210> SEQ ID NO: 7
129 <211> LENGTH: 159
130 <212> TYPE: DNA

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131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: Synthetic sequence
136 <400> SEQUENCE: 7
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138 aggggggcagg gatggctata tttctgggag tcgagtagac cttgttggtg tgaaaattct      120
139 taattcatga gttgtaggga gggatttatg tcagctagc      159
142 <210> SEQ ID NO: 8
143 <211> LENGTH: 195
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Synthetic sequence
150 <400> SEQUENCE: 8
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152 aggggggcagg gatggctata tttctgggag tcgagtagac cttgttggtg tgaaaattct      120
153 taattcatga gttgtaggga gggatttatg aguccucaga cagaaacaaa agccucagta      180
154 ggattcaaag ctacg      195
157 <210> SEQ ID NO: 9
158 <211> LENGTH: 195
159 <212> TYPE: DNA
160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: Synthetic sequence
165 <400> SEQUENCE: 9
166 gagctcgctc cccgcgcgctc gttcaatgag aatggataag aggctcgtgg gattgacgtg      60
167 aggggggcagg gatggctata tttctgggag caatgcaata aagttacgta gtgtctattt      120
168 atctttgata taaggggtat ttccatgggt ttgccttggt atcgtgttca taccgttgta      180
169 ttgaatgatg ctacg      195
172 <210> SEQ ID NO: 10
173 <211> LENGTH: 153
174 <212> TYPE: DNA
175 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Synthetic sequence
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183 atctttgata taaggggtat ttccatggct agc      153
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188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Synthetic sequence
194 <400> SEQUENCE: 11
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196 aggggggcagg gatggctata tttctgggaa aaaagccttc cattttctat tttgatttgt      120
197 agaaaactag tgtgcttggt agtccctgat gattaaataa accaagattt taccatgact      180

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201 <210> SEQ ID NO: 12
202 <211> LENGTH: 183
203 <212> TYPE: DNA
204 <213> ORGANISM: Artificial Sequence
206 <220> FEATURE:
207 <223> OTHER INFORMATION: Synthetic sequence
209 <400> SEQUENCE: 12
210 gagctcgctc ccccgccgctc gttcaatgag aatggataag aggctcgtgg gattgacgtg 60
211 aggggggcagg gatggctata tttctgggaa aaaagccttc cattttctat tttgatttgt 120
212 agaaaactag tgtgcttggg agtccctgat gattaaata accaagattt taccatggct 180
213 agc 183
216 <210> SEQ ID NO: 13
217 <211> LENGTH: 185
218 <212> TYPE: DNA
219 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Synthetic sequence
224 <400> SEQUENCE: 13
225 gagctcgctc ccccgccgctc gttcaatgag aatggataag aggctcgtgg gattgacgtg 60
226 aggggggcagg gatggctata tttctgggag caaaaagcct tccattttct attttgattt 120
227 gtagaaaact agtgtgcttg ggagtcctg atgattaaat aaaccaagat tttaccatgg 180
228 ctacg 185
231 <210> SEQ ID NO: 14
232 <211> LENGTH: 182
233 <212> TYPE: DNA
234 <213> ORGANISM: Artificial Sequence
236 <220> FEATURE:
237 <223> OTHER INFORMATION: Synthetic sequence
239 <400> SEQUENCE: 14
240 gagctcgctc ccccgccgctc gttcaatgag aatggataag aggctcgtgg gattgacgtg 60
241 aggggggcagg gatggctata tttctgggag ggagaccaca acggtttccc actagaaata 120
242 attttgttta actttaagaa ggagatatac atatggcaag catgactggt ggacaggcta 180
243 gc 182
246 <210> SEQ ID NO: 15
247 <211> LENGTH: 182
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: Synthetic sequence
254 <400> SEQUENCE: 15
255 gagctcgctc ccccgccgctc gttcaatgag aatggataag aggctcgtgg gattgacgtg 60
256 aggggggcagg gatggctata tttctgggag ggagaccaca acggtttccc actagaaata 120
257 attttgttta actttaagaa ggagatatac atatggcaat cactagccct gccttggcta 180
258 gc 182
261 <210> SEQ ID NO: 16
262 <211> LENGTH: 161
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264 <213> ORGANISM: Artificial Sequence

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RAW SEQUENCE LISTING

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Input Set : A:\Maliga'105CorrectedSeqList2.txt

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266 <220> FEATURE:
267 <223> OTHER INFORMATION: Synthetic sequence
269 <400> SEQUENCE: 16
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271 aggggggcagg gatggctata tttctgggag ggagaccaca acggtttccc actagaaata      120
272 attttgttta actttaagaa ggagatatac atatggctag c      161
275 <210> SEQ ID NO: 17
276 <211> LENGTH: 1183
277 <212> TYPE: DNA
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Synthetic sequence
283 <400> SEQUENCE: 17
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286 agcgcttgga tacagttgta gggagggatc catggctagc attgaacaag atggattgca      180
287 cgcaggttct ccggccgctt ggggtggagag gctattcggc tatgactggg cacaacagac      240
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290 gtggctggcc acgacgggag ttccttgccg agctgtgctc gacgttgtca ctgaagcggg      420
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293 ggctacctgc ccattcgacc accaagcgaa acatcgcatc gagcgagcac gtactcggat      600
294 ggaagccggt cttgtcgatc aggatgatct ggacgaagag catcaggggc tcgcgccagc      660
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296 tggcgatgcc tgccttgcca atatcatggt ggaaaatggc cgcttttctg gattcatcga      780
297 ctgtggccgg ctgggtgtgg cggaccgcta tcaggacata gcgttggtta cccgtgatat      840
298 tgctgaagag cttggcggcg aatgggctga ccgcttcctc gtgctttacg gtatcgccgc      900
299 tcccgaattcg cagcgcatcg ccttctatcg ccttcttgac gagttcttct gagcgggtct      960
300 agagtagaca ttagcagata aattagcagg aaataaagaa ggataaggag aaagaactca      1020
301 agtaattatc cttcgttctc ttaattgaat tgcaattaaa ctcgcccaa tcttttacta      1080
302 aaaggattga gccgaataca acaaagattc tattgcatat attttgacta agtatatact      1140
303 tacctagata tacaagattt gaaatacaaa atctagcaag ctt      1183
306 <210> SEQ ID NO: 18
307 <211> LENGTH: 610
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
311 <220> FEATURE:
312 <223> OTHER INFORMATION: Synthetic sequence
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VERIFICATION SUMMARY

DATE: 02/24/2003

PATENT APPLICATION: US/09/762,105A

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Input Set : A:\Maliga'105CorrectedSeqList2.txt

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